SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: Protectosil® WS 328

Other means of identification

Recommended restrictions

Recommended use: For industrial use Waterproofing agent
Restrictions on use: Not determined.

Manufacturer/Importer/Distributor Information

Company Name	:	Evonik Corporation 299 Jefferson Road Parsippany, NJ 07054 USA
Telephone	:	+1 973 929 8000
Fax	:	+1 973 929 8042
E-mail	:	product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health Emergency	:	+1 800 424 9300 (CHEMTREC - US & CANADA) +1 800 681 9531 (CHEMTREC MEXICO) +1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin irritation	Category 2

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement: Causes skin irritation.

Precautionary

Statements

Prevention: Wash thoroughly after handling. Wear protective gloves.

Response: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Triethoxy(octyl)silane	2943-75-1	>=25 - <50%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information: Remove contaminated or saturated clothing immediately and dispose of safely.

Inhalation: If aerosol or mists are inhaled, take affected persons out into the fresh air. Possible discomforts include severe irritation of mucus lining (nose, throat, eyes), cough, sneezing and flow of tears. In case of persistent discomfort, obtain medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes before reuse.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not allow contaminated water to contact the unaffected eye or face during irrigation of an affected eye. Consult an ophthalmologist.

Ingestion: If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention. Never administer anything by mouth to an individual who rapidly losing conciousness, unconscious or convulsing.

Personal Protection for First-aid Responders: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

Most important symptoms/effects, acute and delayed

Symptoms: After absorbing large amount of substance, apply therapy for irritative effects. If substance has been swallowed, early endoscopy is recommended in order to assess mucosa lesions in the esophagus and stomach which may appear. If necessary, suck away leftover substance. Allergic reactions cannot be excluded. Apply treatment of allergic reaction if necessary.

Hazards: None known.

Indication of immediate medical attention and special treatment needed

Treatment: If required, therapy of irritative effect. If substance has been swallowed: Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear. If necessary, aspirate leftover substance.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray. foam Carbon Dioxide. dry powder

Unsuitable extinguishing media: High volume water jet

Specific hazards arising from the chemical: May be released in case of fire: carbon monoxide, carbon dioxide. silica In the event of fire and/or explosion do not breathe fumes.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment.

Methods and material for containment and cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Environmental Precautions: Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Provide adequate ventilation.

Safe handling advice: Provide good ventilation or extraction.Handle in accordance with good industrial hygiene and safety practice. If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. Do not breathe in vapours or aerosols. Avoid contact with skin and eyes.

Contact avoidance measures: No data available.

Hygiene measures: Remove contaminated or saturated clothing. Wash contaminated clothing before reuse.

Storage

Safe storage conditions: Normal measures for preventive fire protection. Keep away from sources of ignition - No smoking. Vapours may form explosive mixtures with air.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety glasses with side-shields

Skin Protection

Hand Protection:
Material: Butyl rubber.
Break-through time: >= 480 min
Material: Fluorinated rubber (Viton)
Break-through time: >= 480 min
Material: Nitrile rubber/Nitrile latex (NBR)
Break-through time: >= 480 min
Material: Neoprene.
Break-through time: >= 480 min
Additional Information: Selection of protective gloves to meet the requirements of specific workplaces., Suitability for specific workplaces should be clarified with protective glove manufacturers., The information is based on our own tests, references from the literature and information from glove manufacturers, or derived by analogy with similar materials., Please observe that the daily duration of usage of a chemical protective glove is in practice far shorter due to the many influencing factors (e.g. temperature, mechanical strain on the glove material) than the permeation time determined acc. EN 374.Additional Information: The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use.

Skin and Body Protection: A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

Respiratory Protection:	In case of dusts/vapours/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter (filter type ABEK) or wear a self contained respiratory apparatus Use only respiratory protection equipment with CE-symbol including four digit test number. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. Note time limit for wearing respiratory protective equipment. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.
Hygiene measures:	Remove contaminated or saturated clothing. Wash contaminated clothing before reuse.

9. Physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Color:	White
Odor:	faint inherent odour
Odor Threshold:	not determined
pH:	6 - 9 (25 °C)
Freezing point:	not determined
Boiling Point:	approx. 100 °C
Flash Point:	> 100 °C (DIN EN ISO 2719 (Pensky-Martens, Closed Cup))
Evaporation Rate:	not determined
Flammability (solid, gas):	not determined
Explosive limit - upper (%):	not determined
Explosive limit - lower (%):	not determined
Vapor pressure:	not determined
Vapor density (air=1):	No data available.
Density:	approx. 0.96 g/cm3 (24 °C)
Relative density:	not determined
Solubility(ies)	
Solubility in Water:	miscible
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	not determined
Self Ignition Temperature:	not determined
Decomposition Temperature:	not determined
Kinematic viscosity:	No data available.
Dynamic viscosity:	not determined
Other information	
Explosive properties:	No data available.
Oxidizing properties:	No data available.
Minimum ignition temperature:	not determined

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: Keep away from humidity.

Incompatible Materials: None known.

Hazardous Decomposition Products: Ethanol in case of hydrolysis Alcohol formed by hydrolysis lowers the flash point of the product.

11. Toxicological information

Information on likely routes of exposure

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product:

Components:

Triethoxy(octyl)silane	LD 50 (Rat): > 5,110 mg/kg

Dermal
Product:

Components:

Triethoxy(octyl)silane	LD 50 (Rabbit): 6,730 mg/kg

Inhalation
Product:

Components:

Triethoxy(octyl)silane	maximum concentration in the test: no animals died., Vapour

Repeated dose toxicity

Product:	No data available.
Components:	
Triethoxy(octyl)silane	NOAEL (Rat, Oral): 300 mg/kg

Skin Corrosion/Irritation

Product:	Irritating to skin.

Serious Eye Damage/Eye Irritation

Product:	No data available.

Respiratory or Skin Sensitization

Product:	No data available.
Components:	
Triethoxy(octyl)silane	maximization test, OECD Test Guideline 406 (Guinea Pig): Non sensitising

Carcinogenicity

Product:	Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

US. National Toxicology Program (NTP) Report on Carcinogens:

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Germ Cell Mutagenicity

In vitro

Product:	No data available.
Components:	
Triethoxy(octyl)silane	Ames test (OECD TG 471): negative Chromosomal aberration (OECD TG 473): negative Genetic mutation in mammal cells (OECD TG 476): negative

In vivo

Product:	No data available.

Reproductive toxicity

Product:	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
Triethoxy(octyl)silane	Not classified

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	
Triethoxy(octyl)silane	Not classified

Aspiration Hazard

Product: No data available.

Components:
Triethoxy(octyl)silane No evidence of aspiration toxicity

Other effects: No toxicological tests are available on the product

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: Log Kow: not determined

Mobility in soil: No data available.

Other adverse effects: An Expert Judgment stated that no classification is necessary based on present knowledge.

13. Disposal considerations

Disposal methods:	Waste must be disposed of in accordance with federal, state, provincial and local regulations. Since empty containers retain product residue, follow MSDS and label warnings even after container is emptied.
Contaminated Packaging:	Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. If there is product residue in the emptied container, follow directions for handling on the container's label. Incorrect disposal or reuse of this container is illegal and can be dangerous. Other countries: observe the national regulations.

14. Transport information

Domestic regulation

49 CFR

Not regulated as a dangerous good

Remarks : Not dangerous according to transport regulations.

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Skin Corrosion or Irritation

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act
No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

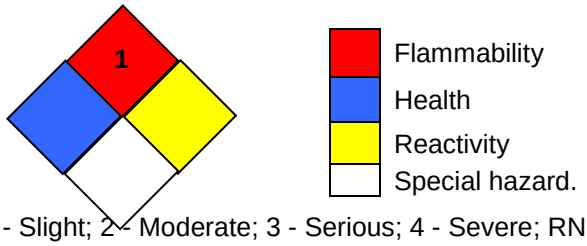
16.Other information, including date of preparation or last revision

HMIS Hazard ID

Health		2
Flammability		1
Physical Hazards		0
PERSONAL PROTECTION		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

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Further Information:	No data available.
Revision Information:	Changes since the last version are highlighted in the margin. This version replaces all previous versions.
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